

## ABSTRACT

A perfusion incubator having an incubation well assembly is provided. A peristaltic pump may supply medium from a medium supply and pass it through a medium conditioning unit before supplying the medium to the incubation well assembly. Each well assembly may have an upper portion and a lower portion, a medium inlet and a medium outlet. The medium inlet may be positioned at a mid point in the well and the medium outlet is positioned above the medium inlet. An embryo may reside in the lower portion of the well. The well assembly may be formed from a permeable material through which a gas, such as carbon dioxide and/or oxygen, can diffuse.